Pham 27891

1: Artorias_47 + 1
2: Odesza_46
3: Perkunas_50
4: Gill_47 + 4
5: Conley_46
6: Petito_47
7: Avazak_48
8: Capybara_47
9: Captrips_48
10: Roney_47
11: Pupper_73
12: Skog_134
13: CherryTomatoes_76
14: SCentae_72

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 27891 Report

This analysis was run 04/28/24 on database version 559.

Pham number 27891 has 19 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Artorias_47, FortCran_51
• Track 2 : Odesza_46
• Track 3 : Perkunas_50
• Track 4 : Gill_47, Magel_48, Tanis_47, Kerry_46, Gravy_46
• Track 5 : Conley_46
• Track 6 : Petito_47
• Track 7 : Avazak_48
• Track 8 : Capybara_47
• Track 9 : Captrips_48
• Track 10 : Roney_47
• Track 11 : Pupper_73
• Track 12 : Skog_134
• Track 13 : CherryTomatoes_76
• Track 14 : SCentae_72

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 2, it was called in 10 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artorias_47, Avazak_48, Captrips_48, Conley_46, FortCran_51, Gill_47, Gravy_46, Kerry_46, Magel_48, Odesza_46, Perkunas_50, Petito_47, Roney_47, Tanis_47,

Genes that have the "Most Annotated" start but do not call it:
• Capybara_47,

Genes that do not have the "Most Annotated" start:
• CherryTomatoes_76, Pupper_73, SCentae_72, Skog_134,

Summary by start number:

Start 2:
• Found in 15 of 19 (78.9%) of genes in pham

• Manual Annotations of this start: 10 of 13
• Called 93.3% of time when present
• Phage (with cluster) where this start called: Artorias_47 (DJ), Avazak_48 (DJ), Captrips_48 (DJ), Conley_46 (DJ), FortCran_51 (DJ), Gill_47 (DJ), Gravy_46 (DJ), Kerry_46 (DJ), Magel_48 (DJ), Odesza_46 (DJ), Perkunas_50 (DJ), Petito_47 (DJ), Roney_47 (DJ), Tanis_47 (DJ),

Start 3:
• Found in 4 of 19 (21.1%) of genes in pham
• Manual Annotations of this start: 3 of 13
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_76 (DO), Pupper_73 (DO), SCentae_72 (DO), Skog_134 (DO),

Start 4:
• Found in 8 of 19 (42.1%) of genes in pham
• No Manual Annotations of this start.
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Capybara_47 (DJ),

Summary by clusters:

There are 2 clusters represented in this pham: DO, DJ,

Info for manual annotations of cluster DJ:
•Start number 2 was manually annotated 10 times for cluster DJ.

Info for manual annotations of cluster DO:
•Start number 3 was manually annotated 3 times for cluster DO.

Gene Information:

Gene: Artorias_47 Start: 32963, Stop: 34399, Start Num: 2
Candidate Starts for Artorias_47:
(Start: 2 @32963 has 10 MA's), (5, 32999), (10, 33134), (11, 33212), (13, 33275), (14, 33293), (29, 33713), (36, 33893), (39, 33980), (43, 34148), (51, 34268),

Gene: Avazak_48 Start: 33308, Stop: 34744, Start Num: 2
Candidate Starts for Avazak_48:
(Start: 2 @33308 has 10 MA's), (5, 33344), (10, 33479), (11, 33557), (12, 33590), (13, 33620), (14, 33638), (22, 33929), (29, 34058), (36, 34238), (39, 34325), (51, 34613),

Gene: Captrips_48 Start: 32460, Stop: 33896, Start Num: 2
Candidate Starts for Captrips_48:
(Start: 2 @32460 has 10 MA's), (5, 32496), (10, 32631), (11, 32709), (13, 32772), (14, 32790), (21, 33078), (22, 33081), (28, 33207), (29, 33210), (36, 33390), (39, 33477), (43, 33645), (51, 33765),

Gene: Capybara_47 Start: 32868, Stop: 34295, Start Num: 4
Candidate Starts for Capybara_47:
(Start: 2 @32847 has 10 MA's), (4, 32868), (5, 32883), (7, 32895), (9, 33021), (10, 33027), (11, 33105), (13, 33168), (14, 33186), (15, 33243), (18, 33396), (20, 33456), (24, 33528), (30, 33618), (36,

33786), (39, 33873), (46, 34068), (47, 34104), (49, 34128), (50, 34152), (53, 34173),

Gene: CherryTomatoes_76 Start: 25881, Stop: 27251, Start Num: 3
Candidate Starts for CherryTomatoes_76:
(Start: 3 @25881 has 3 MA's), (6, 25923), (8, 26040), (16, 26322), (17, 26325), (23, 26514), (25, 26565), (26, 26574), (27, 26604), (30, 26649), (31, 26664), (33, 26748), (34, 26751), (35, 26775), (38, 26877), (42, 27006), (43, 27039),

Gene: Conley_46 Start: 33396, Stop: 34835, Start Num: 2
Candidate Starts for Conley_46:
(1, 33360), (Start: 2 @33396 has 10 MA's), (5, 33432), (10, 33564), (11, 33642), (12, 33675), (13, 33705), (22, 34014), (29, 34143), (32, 34215), (36, 34323), (39, 34410), (41, 34536), (42, 34542), (43, 34578), (45, 34587),

Gene: FortCran_51 Start: 32963, Stop: 34399, Start Num: 2
Candidate Starts for FortCran_51:
(Start: 2 @32963 has 10 MA's), (5, 32999), (10, 33134), (11, 33212), (13, 33275), (14, 33293), (29, 33713), (36, 33893), (39, 33980), (43, 34148), (51, 34268),

Gene: Gill_47 Start: 32864, Stop: 34312, Start Num: 2
Candidate Starts for Gill_47:
(Start: 2 @32864 has 10 MA's), (4, 32885), (5, 32900), (7, 32912), (9, 33038), (10, 33044), (11, 33122), (13, 33185), (14, 33203), (15, 33260), (18, 33413), (20, 33473), (24, 33545), (30, 33635), (36, 33803), (39, 33890), (46, 34085), (47, 34121), (49, 34145), (50, 34169), (53, 34190),

Gene: Gravy_46 Start: 32537, Stop: 33985, Start Num: 2
Candidate Starts for Gravy_46:
(Start: 2 @32537 has 10 MA's), (4, 32558), (5, 32573), (7, 32585), (9, 32711), (10, 32717), (11, 32795), (13, 32858), (14, 32876), (15, 32933), (18, 33086), (20, 33146), (24, 33218), (30, 33308), (36, 33476), (39, 33563), (46, 33758), (47, 33794), (49, 33818), (50, 33842), (53, 33863),

Gene: Kerry_46 Start: 32537, Stop: 33985, Start Num: 2
Candidate Starts for Kerry_46:
(Start: 2 @32537 has 10 MA's), (4, 32558), (5, 32573), (7, 32585), (9, 32711), (10, 32717), (11, 32795), (13, 32858), (14, 32876), (15, 32933), (18, 33086), (20, 33146), (24, 33218), (30, 33308), (36, 33476), (39, 33563), (46, 33758), (47, 33794), (49, 33818), (50, 33842), (53, 33863),

Gene: Magel_48 Start: 32768, Stop: 34216, Start Num: 2
Candidate Starts for Magel_48:
(Start: 2 @32768 has 10 MA's), (4, 32789), (5, 32804), (7, 32816), (9, 32942), (10, 32948), (11, 33026), (13, 33089), (14, 33107), (15, 33164), (18, 33317), (20, 33377), (24, 33449), (30, 33539), (36, 33707), (39, 33794), (46, 33989), (47, 34025), (49, 34049), (50, 34073), (53, 34094),

Gene: Odesza_46 Start: 32538, Stop: 34007, Start Num: 2
Candidate Starts for Odesza_46:
(Start: 2 @32538 has 10 MA's), (4, 32559), (5, 32574), (7, 32586), (9, 32712), (10, 32718), (11, 32796), (13, 32859), (14, 32877), (15, 32934), (18, 33087), (20, 33147), (24, 33219), (30, 33309), (36, 33477), (39, 33564), (46, 33759), (47, 33795), (49, 33819), (50, 33843), (52, 33864), (53, 33885),

Gene: Perkunas_50 Start: 32833, Stop: 34278, Start Num: 2
Candidate Starts for Perkunas_50:
(Start: 2 @32833 has 10 MA's), (5, 32869), (10, 33001), (11, 33079), (13, 33142), (14, 33160), (22, 33451), (36, 33760), (39, 33847), (42, 33979), (43, 34015), (44, 34018), (46, 34039), (48, 34078), (49,

34099), (51, 34135),

Gene: Petito_47 Start: 34472, Stop: 35896, Start Num: 2
Candidate Starts for Petito_47:
(Start: 2 @34472 has 10 MA's), (5, 34508), (7, 34520), (10, 34640), (11, 34718), (12, 34751), (13, 34781), (22, 35090), (29, 35219), (36, 35399), (37, 35429), (39, 35486), (40, 35582), (43, 35654), (45, 35663), (46, 35678), (50, 35753),

Gene: Pupper_73 Start: 25982, Stop: 27352, Start Num: 3
Candidate Starts for Pupper_73:
(Start: 3 @25982 has 3 MA's), (6, 26024), (8, 26141), (16, 26423), (17, 26426), (23, 26615), (25, 26666), (27, 26705), (30, 26750), (31, 26765), (33, 26849), (34, 26852), (35, 26876), (38, 26978), (42, 27107), (43, 27140),

Gene: Roney_47 Start: 32859, Stop: 34307, Start Num: 2
Candidate Starts for Roney_47:
(Start: 2 @32859 has 10 MA's), (4, 32880), (5, 32895), (7, 32907), (9, 33033), (10, 33039), (11, 33117), (13, 33180), (14, 33198), (15, 33255), (18, 33408), (20, 33468), (24, 33540), (36, 33798), (39, 33885), (46, 34080), (47, 34116), (49, 34140), (50, 34164), (53, 34185),

Gene: SCentae_72 Start: 25736, Stop: 27106, Start Num: 3
Candidate Starts for SCentae_72:
(Start: 3 @25736 has 3 MA's), (6, 25778), (8, 25895), (16, 26177), (17, 26180), (19, 26330), (25, 26420), (26, 26429), (27, 26459), (30, 26504), (31, 26519), (33, 26603), (34, 26606), (35, 26630), (38, 26732), (42, 26861), (43, 26894),

Gene: Skog_134 Start: 54720, Stop: 56084, Start Num: 3
Candidate Starts for Skog_134:
(Start: 3 @54720 has 3 MA's), (6, 54762), (7, 54768), (8, 54882), (16, 55164), (17, 55167), (19, 55317), (23, 55356), (25, 55407), (26, 55416), (27, 55446), (30, 55491), (31, 55506), (33, 55590), (34, 55593), (35, 55617), (38, 55719), (42, 55848), (43, 55881),

Gene: Tanis_47 Start: 32710, Stop: 34158, Start Num: 2
Candidate Starts for Tanis_47:
(Start: 2 @32710 has 10 MA's), (4, 32731), (5, 32746), (7, 32758), (9, 32884), (10, 32890), (11, 32968), (13, 33031), (14, 33049), (15, 33106), (18, 33259), (20, 33319), (24, 33391), (30, 33481), (36, 33649), (39, 33736), (46, 33931), (47, 33967), (49, 33991), (50, 34015), (53, 34036),